

WHAT IS CLAIMED IS:

1. A system for enlarging images, comprising:

a positioning device;

a control panel coupled to move the positioning device;

5 a video camera, coupled to the positioning device, which provides a video output;

a monitor, connected to the video camera, which displays the video output;

a stage, on which material of any type may be placed, wherein the video camera films the material, and the monitor displays the material at a high magnification.

2. The system of claim 1, wherein the positioning device comprises:

10 a first set of parallel rods;

a second set of parallel rods, movably mounted perpendicular to the first set of parallel rods;

a carriage mounted for movement along the second set of parallel rods;

15 a first motor coupled to move the second set of parallel rods along the first set of parallel rods;

a second motor coupled to move the carriage along the second set of parallel rods, wherein the control panel actuates the first and second motors.

3. The system of claim 2, wherein the first set of parallel rods contains left and right ends, and wherein the second set of parallel rods contains top and bottom ends.

20 4. The system of claim 3, further comprising a first perimeter plate, perpendicular to the first set of parallel rods, connected to the left ends of the first set of parallel rods, and a second perimeter plate, perpendicular to the first set of parallel rods, connected to the right ends of the first set of parallel rods.

5. The system of claim 4, further comprising:

25 a first mounting plate, perpendicular to the second set of parallel rods, connected to the top ends of the second set of parallel rods;

a second mounting plate, perpendicular to the second set of parallel rods, connected to the bottom ends of the second set of parallel rods;

30 bushings attached to the two mounting plates, wherein the bushings slide over the first set of parallel rods, allowing the second set of parallel rods to travel along the first set of parallel rods between the two perimeter plates.

6. The system of claim 5, wherein the control panel includes a left control button, a right control button, an up control button and a down control button.
7. The system of claim 5, wherein the control panel includes a joystick.
8. The system of claim 5, further comprising a mounting wall and a set of wall mounting plates  
5 connected to the first set of parallel rods, to allow mounting of the positioning device to the mounting wall.
9. The system of claim 8, wherein the mounting wall is perpendicular to both the stage and to positioning device, wherein the mounting wall contains an opening at its base, wherein the positioning device is above the stage.
10. The system of claim 8, wherein the first motor is attached to the mounting wall and the  
10 second motor is attached to the carriage.
11. The system of claim 8, wherein the first motor is coupled to the mounting plates by a chain pulley.
12. The system of claim 8, wherein the first motor is coupled to the mounting plates by a first  
15 chain pulley, a second chain pulley, and a turning rod.
13. The system of claim 8, wherein the second motor is coupled to the carriage by a chain pulley.
14. The system of claim 8, wherein the first motor is coupled to the mounting plates by a rubber cog belt.
15. The system of claim 8, wherein the first motor is coupled to the mounting plates by a first  
20 rubber cog belt, a second rubber cog belt, and a turning rod.
16. The system of claim 8, wherein the second motor is coupled to the carriage by a rubber cog belt.
17. The system of claim 8, further comprising a set of two turnbuckles, connected to the wall plate on a right end and to the first perimeter plate on a left end.
- 25 18. The system of claim 8, further comprising perimeter plate nuts, wherein the left and right ends of the first set of parallel rods have a diameter and are threaded, the first and second perimeter plates contain two holes with a diameter slightly larger than the diameter of the ends of the rods, wherein the first set of parallel rods are connected to the perimeter plates by nuts over the threaded ends.
- 30 19. The system of claim 8, further comprising mounting plate nuts, wherein the top and bottom ends of the second set of parallel rods have a diameter and are threaded, the first and second

mounting plates contain two holes with a diameter slightly larger than the diameter of the ends of the rods, wherein the second set of parallel rods are connected to the perimeter plates by nuts over the threaded ends.

20. The system of claim 8, wherein the control panel is coupled to the first and second motors by  
5 6 wire cable.

21. The system of claim 8, wherein the control panel is coupled to the first and second motors by infrared connection.

22. The system of claim 8, wherein the control panel is coupled to the first and second motors by RF signal.

10 23. The system of claim 8, wherein the video camera is connected to the monitor by wire cable.

24. The system of claim 8, wherein the video camera is connected to the monitor by infrared connection.

25. The system of claim 8, wherein the video camera is connected to the monitor by RF signal.

26. The system of claim 8, wherein the up control button moves the mounting plates in a  
15 direction towards the right ends of the first set of parallel rods.

27. The system of claim 8, wherein the down control button moves the mounting plates in a direction towards the left ends of the first set of parallel rods.

28. The system of claim 8, wherein the left control button moves the carriage in a direction towards the up ends of the second set of parallel rods.

20 29. The system of claim 8, wherein the right control button moves the carriage in a direction towards the down ends of the second set of parallel rods.

30. The system of claim 8, further comprising limit switches, attached to both the carriage and the mounting plates, wherein the limit switches constrain the motion of the carriage within the boundaries of the perimeter plates and the mounting plates.

25 31. The system of claim 30, wherein the limit switches are coupled to the control panel buttons.

32. A system for displaying a magnified an image onto a monitor, comprising:

a video camera;

translating means for translating the video camera in two perpendicular directions;

controlling means for controlling the translating of the video camera;

30 displaying means for displaying an image captured by the video camera onto a monitor.

33. The system of claim 32, wherein the translating means include movement of a carriage along a first track, wherein the first track is itself movable along a second track.

34. The system of claim 33, wherein the controlling means include means for controlling movement of the carriage along the first track, and means for controlling movement of the second track along the first track.

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